### UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF OHIO

UNITED STATES OF AMERICA,	)
Plaintiff,	) Civil Action No
v.	)
DIESEL SPEC INC.,	) COMPLAINT
Defendant.	) ) )

The United States of America ("United States"), by authority of the Attorney General of the United States and at the request of the Administrator of the United States Environmental Protection Agency ("EPA"), through its undersigned counsel, files this Complaint and alleges as follows:

### I. NATURE OF THE CASE

1. This is a civil action brought under 42 U.S.C. §§ 7522-24, seeking preliminary and permanent injunctive relief and civil penalties against Diesel Spec Inc. ("Diesel Spec") for violations of the Clean Air Act ("CAA¹") related to Defendant's sale, offering to sell, and installation of aftermarket products that bypass, defeat, or render inoperative emission controls installed on motor vehicles, motor vehicle engines, nonroad vehicles, and nonroad engines located in the United States in violation of the CAA (herein referred to as "Defeat Devices").

<sup>&</sup>lt;sup>1</sup> A table of acronyms used herein is provided at page 33 for reference.

- 2. As alleged in this Complaint, Defendant, individually and through its network of distributors, has put the public health at risk by selling and installing thousands of Defeat Devices through a network of more than 400 distributors across North America.
- 3. Diesel Spec's website (www.dieselspec.com) displays (or displayed) the following image, which is a map that identifies a significant number of Defendant's distributors located in North America, including in the United States:



- 4. Defendant installed, individually and through its network of distributors, Defeat Devices on certified motor vehicles and engines in the United States in violation of 42 U.S.C. § 7522(a)(3).
- 5. Diesel Spec's website boasts (or boasted) that, "Diesel Spec is the leader in truck diesel engine ECM tuning technology. With over 50,000 medium and heavy diesel truck tuning performed, Diesel Spec has built its reputation with countless satisfied customers all over the world."
- 6. Defendant installed, individually and through its network of distributors, Defeat Devices on certified nonroad vehicles and engines in the United States in violation of 40 C.F.R. § 1068.101(b).

- 7. On Diesel Spec's Construction and Agricultural Division websites (www.dieselspec-construction.com and www.dieselspec-agriculture.com), it boasts (or boasted) that it is "the leader in ECM tuning technology for agricultural equipment and heavy trucks diesel engines. With over 25,000 tuning performed . . ."
- 8. Disabling emissions controls from vehicles and engines presents a serious threat to human health because vehicle emissions are linked to serious illnesses including heart and lung disease, heart attacks, aggravated asthma, and can even cause premature death. To prevent this threat, the CAA imposes stringent standards for the emission of air pollutants from vehicles and engines and prohibits the manufacture, sale, and installation of any device intended to disable emissions controls designed to comply with those emissions standards. 42 U.S.C. §§ 7521(a), 7522(a).
- 9. In addition to Defendant's sale and installation of Defeat Devices on motor vehicle engines and nonroad engines, Defendant has refused to provide the Government basic information about the sale and use of its products, in violation of 42 U.S.C. § 7522(a)(2)(A).

### II. JURISDICTION AND VENUE

- 10. This action is brought by the United States under the Clean Air Act, 42 U.S.C. §§ 7522-24. This Court has subject matter jurisdiction over Clean Air Act claims pursuant to 42 U.S.C. §§ 7523 and 7524, and 28 U.S.C. §§ 1331 (Federal Question), 1345 (United States as Plaintiff), and 1355 (Fine, Penalty, or Forfeiture).
- 11. This court has personal jurisdiction over the parties pursuant to Federal Rule of Civil Procedure Rule 4(k)(1) because Defendant is subject to the personal jurisdiction of the State of Ohio in accordance with Section 2307.382(A)(1) of the Ohio Code and Ohio Rule of

Civil Procedure 4.2 because the claims arise from Defendant's transaction of business in the State.

- 12. In the alternative, this Court has personal jurisdiction over the parties to this action pursuant to Federal Rule of Civil Procedure Rule 4(k)(2) because Defendant is not subject to jurisdiction in any state's courts of general jurisdiction, and exercising jurisdiction is consistent with the United States Constitution and laws.
- 13. Venue is proper in the Northern District of Ohio pursuant to 28 U.S.C. §§ 1391(b)(2), 1391(c)(2), and 1395(a), as well as 42 U.S.C. §§ 7523 and 7524, because it is a judicial district in which Defendant is doing business and where a substantial part of the alleged violations in the Complaint occurred.

### III. DEFENDANT

- 14. Diesel Spec is a corporation with its principal office at 200 Goyer, La Prairie, Quebec, J5R 5G5, Canada.
  - 15. Defendant is a "person" within the meaning of 42 U.S.C. § 7602(e).

### IV. <u>LEGAL BACKGROUND</u>

16. This action arises under Title II of the CAA, as amended, 42 U.S.C. §§ 7521-90, and the regulations promulgated thereunder relating to the control of emissions of air pollution from motor vehicles, motor vehicle engines, nonroad engines, and nonroad vehicles.

### A. Statutory and Regulatory Overview

17. In creating the CAA, Congress found that "the growth in the amount and complexity of air pollution brought about by urbanization, industrial development, and the increasing use of motor vehicles, has resulted in mounting dangers to the public health and welfare. . ." 42 U.S.C. § 7401(a)(2). Congress's purpose in creating the CAA was, among other

things, "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." 42 U.S.C. § 7401(b)(1).

- 18. "Motor vehicle" is defined in the CAA as "any self-propelled vehicle designed for transporting persons or property on a street or highway." 42 U.S.C. § 7550(2); 40 C.F.R. § 85.1703.
- 19. Under 42 U.S.C. § 7550(10), a "nonroad engine" is "an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 of this title or section 7521 of this title." 42 U.S.C. § 7550(10).
- 20. Under 42 U.S.C. § 7550(11), a "nonroad vehicle" is a "vehicle that is powered by a nonroad engine and that is not a motor vehicle or a vehicle used solely for competition." 42 U.S.C. § 7550(11).
- 21. Title II of the CAA and the regulations promulgated thereunder establish standards for the emissions of air pollutants from motor vehicles and motor vehicle engines that "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7521(a). These pollutants include nitrogen oxides ("NO<sub>x</sub>"), particulate matter ("PM"), non-methane hydrocarbons ("NMHCs"), and carbon monoxide ("CO"). 42 U.S.C. § 7521(a)(3)(A).
- 22. Additionally, 42 U.S.C. § 7547(a)(3) requires EPA to promulgate standards for nonroad engines and vehicles that will achieve the greatest degree of emission reduction available and requires that EPA consider standards equivalent in stringency to those applicable to motor vehicles. 42 U.S.C. § 7547(a)(3).

- 23. EPA has also established National Ambient Air Quality Standards for certain pollutants, including ozone, NO<sub>x</sub>, PM, and CO. *See* 40 C.F.R. §§ 50.1-50.19.
- 24. Ozone (ground level) is a highly reactive gas that is formed in the atmosphere from emissions of other pollutants, including emissions from motor vehicles.
- 25. PM is a form of air pollution composed of microscopic solids and liquids suspended in air. PM is emitted directly from motor vehicles and is also formed in the atmosphere from other pollutants, including pollutants emitted from motor vehicles.
- 26. NO<sub>x</sub> and NMHCs are reactive gases that contribute to the formation of ozone and PM.
- 27. Exposure to ozone and PM is linked to respiratory and cardiovascular health problems as well as premature death. Children, older adults, people who are active outdoors (including outdoor workers), and people with heart or lung disease are particularly at risk for health effects related to ozone or PM exposure.
- 28. CO is a toxic gas that forms when the carbon in fuel does not burn completely.

  CO is harmful to human health because it reduces oxygen delivery to the body's organs and tissues. CO can cause headaches, dizziness, vomiting, nausea, loss of consciousness, and death.

  Long-term exposure to CO has been associated with an increased risk of heart disease.
  - B. EPA's Certificate of Conformity Program for New Motor Vehicles and Motor Vehicle Engines
- 29. Manufacturers of new motor vehicles or motor vehicle engines must apply for and obtain a certificate of conformity ("COC") from EPA to sell, offer to sell, or introduce or deliver for introduction into commerce any new motor vehicle or motor vehicle engine in the United States. 42 U.S.C. § 7522(a)(1).

- 30. To obtain a COC, the original equipment manufacturer ("OEM") must demonstrate that the motor vehicle or motor vehicle engine will conform to established emissions standards for NO<sub>x</sub>, PM, NMHCs, and CO, and other pollutants during the motor vehicle or motor vehicle engine's useful life. 42 U.S.C. § 7525(a)(2); *see* 40 C.F.R. §§ 86.007-30(a)(1)(i), 86.1848-01(a)(1).
- 31. The COC application must include a description of the motor vehicle's emission control system and fuel system components. 40 C.F.R. §§ 86.094-21(b)(1), 86.1844-01(d)-(e).
- 32. Once issued by EPA, a COC covers only those new motor vehicles or motor vehicle engines that conform in all material respects to the specifications provided to EPA in the COC application for such vehicles or engines. 40 C.F.R. § 86.1848-01(c)(6).
  - C. EPA's Certificate of Conformity Program for Nonroad Compression-Ignition (Diesel) Engines
- 33. Manufacturers of new nonroad compression-ignition engines must apply for and obtain a COC from EPA to sell, offer to sell, or introduce or deliver for introduction into commerce any new nonroad compression-ignition engine in the United States. 42 U.S.C. § 7522(a)(1); 40 C.F.R. § 1068.101(a)(1).
- 34. Pursuant to 42 U.S.C. § 7547(d), the standards to obtain a COC are the same for a nonroad vehicle as for a motor vehicle in that the manufacturer must demonstrate that the engine will conform to established emissions standards for NO<sub>x</sub>, PM, NMHCs, and CO, and other pollutants.
- 35. To obtain a COC, an engine manufacturer must submit an application for a COC to EPA for each nonroad engine family and each model year that it intends to manufacture the engine family for introduction into commerce. The COC application must include, among other things, identification of the covered engine family, a description of the nonroad engines and their

emission control system, and test results from a test engine or engines showing that the engine family satisfies applicable emissions standards. 40 C.F.R. §§ 1039.201; 1039.205.

- 36. If, after review of the COC application and other information, EPA determines that the test engine or engines described in the certificate of conformity application meet(s) the requirements of the CAA, EPA will issue a certificate of conformity for the nonroad engine family for that model year. 40 C.F.R. § 1039.255.
- 37. The provisions of 40 C.F.R. part 1068 apply to land-based nonroad compressionignition engines that are subject to the provisions of 40 C.F.R. part 1039. 40 C.F.R. § 1068.1(a)(6).

### D. Acts Prohibited by Section 203 of the Clean Air Act

38. The following acts are prohibited by 42 U.S.C. § 7522(a)(3)(A):

"for any person to remove or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with the regulations [promulgated under Title II of the CAA] prior to its sale and delivery to the ultimate purchaser, or for any person knowingly to remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser."

- 39. The following acts are prohibited by 42 U.S.C. § 7522(a)(3)(B):
  - "for any person to manufacture or sell, offer to sell, or install any part or component intended for use with, or as a part of, any motor vehicle or motor vehicle engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations [promulgated under Title II of the CAA], and where the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use."
- 40. Additionally, 42 U.S.C. § 7522(a) prohibits any person from causing a violation of 42 U.S.C. § 7522(a)(3)(A) or (B).

- 41. Any person violating 42 U.S.C. § 7522(a)(3)(A) or (B) is subject to injunctive relief and civil penalties of up to \$5,580 for each violation occurring after November 2, 2015, in accordance with Section 205(a) of the CAA. 42 U.S.C. § 7524(a) as modified by 40 C.F.R. § 19.4 (2023); 87 Fed. Reg. 1,988 (Jan. 6, 2023).
- 42. Each part or component manufactured, sold, offered for sale, or installed in violation of 42 U.S.C. § 7522(a)(3)(B), is a separate violation of 42 U.S.C. § 7522(a)(3)(B). 42 U.S.C. § 7524(a).

### E. Acts Prohibited by Section 213 of the Clean Air Act

43. The general compliance regulations for nonroad engines, 40 C.F.R. § 1068.101(b)(1) prohibits a person to:

"remove or render inoperative any device or element of design installed on or in engines/equipment in compliance with the regulations prior to its sale and delivery to the ultimate purchaser. You also may not knowingly remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser."

- 44. 40 C.F.R. § 1068.101(b)(2) also prohibits a person to:
  - "knowingly manufacture, sell, offer to sell, or install, any component that bypasses, impairs, defeats, or disables the control of emissions of any regulated pollutant, except as explicitly allowed by the standard-setting part."
- 45. The regulations also prohibit any person to cause someone to violate 40 C.F.R. § 1068.101(b)(1) or (2). 40 C.F.R. § 1068.101(c); 40 C.F.R. § 1068.101(h).
- 46. 42 U.S.C. § 7547 states that nonroad vehicle and engine standards, "shall be enforced in the same manner as standards prescribed under [42 U.S.C. § 7521,]" for motor vehicles and motor vehicle engines, and that the Administrator "shall revise or promulgate regulations as may be necessary to determine compliance with, and enforce, standards in effect under [42 U.S.C. § 7547]."

47. Therefore, any person in violation of 40 C.F.R. § 1068.101(b)(1) or (2) is subject to injunctive relief and civil penalties of up to \$5,580 for each component, engine, or piece of equipment in violation. 40 C.F.R. § 1068.101(b)(1); 40 C.F.R. § 1068.101(b)(2); 40 C.F.R. § 1068.101(h).

### F. EPA's Information Gathering Authority Under the Clean Air Act

- 48. Under 42 U.S.C. § 7542(a), persons subject to Title II, Part A are required to maintain records and to provide information that EPA may reasonably require to determine whether the person has acted or is acting in compliance with the mobile source provisions of the CAA.
- 49. 42 U.S.C. § 7522(a)(2)(A) prohibits a person from failing to provide information required by the section or cause someone to fail to provide such information.
- 50. Any person violating 42 U.S.C. § 7522(a)(2)(A) is subject to civil penalties of up to \$55,808 per day for each violation occurring after November 2, 2015. 42 U.S.C. §§ 7524(a), 7525(a), as modified by 40 C.F.R. § 19.4 (2023).

### **G.** Emission Control Systems

- 51. An "emission control system" for a highway motor vehicle is a "unique group of emission control devices, auxiliary emission control devices, engine modifications and strategies, and other elements of design designated by the Administrator [of EPA] used to control exhaust emissions of a vehicle." 40 C.F.R. § 86.1803-01.
- 52. For a nonroad vehicle, an "emission control system" is similarly defined as "any device, system, or element of design that controls or reduces the emissions of regulated pollutants from an engine." 40 C.F.R. § 1039.801.
- 53. OEMs install a variety of software and hardware elements of design and emission control systems in motor vehicles, motor vehicle engines, nonroad vehicles, and nonroad engines

to monitor and control emissions of pollutants in order to comply with the CAA and the regulations promulgated thereunder and to obtain a COC. These elements of design and emission control systems are hereinafter referred to in this Complaint as "Emission Control Systems."

- 54. Emission Control Systems generally include both the specific hardware and the software that controls operation of that hardware.
- 55. <u>Electronic Control Units.</u> Motor vehicles and nonroad vehicles are equipped with "Electronic Control Units" or "ECUs" (a/k/a an "engine control module" or "ECM"), which are on-board computer systems that run software that monitors and controls vehicle and engine operations, including the operation of Emission Control Systems.
- 56. <u>Auxiliary Emission Control Devices.</u> Motor vehicles and nonroad vehicles are also equipped with auxiliary emission control devices ("AECDs") which are Emission Control Systems that sense temperature, motor speed, engine revolution per minute (RPM), transmission gear, or any other parameter for the purpose of activating, modulating, delaying, or deactivating the operation of any part of a motor vehicle's emission control system. 40 C.F.R. § 1037.801 and 1039.801.
- 57. Exhaust Gas Recirculation System ("EGR System"). Diesel engines produce high combustion temperatures that result in the production of NO<sub>x</sub>. An EGR System reduces NO<sub>x</sub> emissions by recirculating a portion of engine exhaust gas back through the engine's cylinders, thereby lowering combustion temperature and reducing NO<sub>x</sub> formation.
- 58. The EGR System includes but is not limited to the EGR cooler, throttle valve, other valves, piping, flanges, and gaskets as well as various other hardware, parts, sensors, subassemblies, AECDs, Electronic Control Unit software (calibrations) and other components that collectively constitute the system for implementing this emissions control strategy.

- 59. The EGR System is an element of design within the meaning of 40 C.F.R. § 86.1803-01 and 40 C.F.R. § 1039.801 and is an Emission Control System.
- 60. <u>Aftertreatment System.</u> As an alternative or in addition to EGRs, OEMs typically equip motor vehicles and nonroad vehicles with one or more Aftertreatment Systems "whose design function is to reduce emissions in the engine exhaust before it is exhausted to the environment." *See* 40 C.F.R. § 1068.30.
- 61. A motor vehicle or nonroad vehicle's Aftertreatment System consists of hardware installed in the stock exhaust system, as well as software that runs on one or more Electronic Control Units and directs operation of the hardware components.
- 62. Diesel Particulate Filters ("DPFs"), Selective Catalytic Reduction ("SCR")

  Systems, and NO<sub>x</sub> Adsorption Catalysts ("NACs") are components of the Aftertreatment System that OEMs employ to control the emission of pollutants.
- a. <u>Diesel Particulate Filter ("DPF").</u> A DPF is a filter that captures particulates or soot from engine exhaust, thereby decreasing PM emissions. By design, soot that collects in the DPF is periodically burned off by elevated exhaust temperatures in a process referred to as active or passive regeneration. The DPF includes all hardware, parts, sensors, subassemblies, AECDs, Electronic Control Unit software (calibrations), and other components that collectively constitute the system for implementing this emissions control strategy.
- b. The DPF is an element of design within the meaning of 40 C.F.R. § 86.1803-01 and 40 C.F.R. § 1039.801 and is an Emission Control System.
- c. <u>Selective Catalytic Reduction ("SCR").</u> A Selective Catalytic Reduction ("SCR") system (a type of "catalytic converter" or "catalyst") reduces NO<sub>x</sub> emissions by chemically converting exhaust gas that contains NO<sub>x</sub> into nitrogen and water through the

injection of diesel exhaust fluid, typically composed of urea. The SCR includes all hardware, parts, sensors, subassemblies, AECDs, Electronic Control Unit software (calibrations), and other components that collectively constitute the system for implementing this emissions control strategy.

- d. The SCR is an element of design within the meaning of 40 C.F.R. § 86.1803-01 and 40 C.F.R. § 1039.801 and is an Emission Control System.
- e. <u>NO<sub>x</sub> Adsorption Catalyst ("NAC")</u>. A NO<sub>x</sub> Adsorption Catalyst ("NAC") (a type of "catalytic converter" or "catalyst", a/k/a "NO<sub>x</sub> trap") reduces NO<sub>x</sub> emissions by chemically adsorbing NO<sub>x</sub> from exhaust gas. The NAC includes all hardware, parts, sensors, subassemblies, AECDs, Electronic Control Unit software (calibrations), and other components that collectively constitute the system for implementing this emissions control strategy.
- f. The NAC is an element of design within the meaning of 40 C.F.R. § 86.1803-01 and 40 C.F.R. § 1039.801 and is an Emission Control System.
- On Board Diagnostics System. The CAA requires OEMs to install an On-Board Diagnostics system ("OBD") on motor vehicles. 42 U.S.C. § 7521(m). The OBD monitors, detects, reports, and records malfunctions of monitored Emission Control Systems and other components through the controller area network installed throughout the motor vehicle or motor vehicle engine. 40 C.F.R. §§ 86.007-17, 86.010-18, 86.1806-05.
- 64. The OBD monitors sensor inputs for malfunction or deterioration that could cause a vehicle to fail to comply with CAA emission standards and may command the Electronic Control Unit to alter vehicle operation so that malfunctions can be corrected. The OBD System includes hardware, parts, sensors, subassemblies, AECDs, Electronic Control Unit software (calibrations), and other components that collectively constitute the system.

- 65. The OBD System is an element of design within the meaning of 40 C.F.R. § 86.1803-01 and 40 C.F.R. § 1039.801 and is an Emission Control System.
- a. CAA regulations require that when the OBD System detects a malfunction of an emissions-related system or component, it must illuminate the vehicle's malfunction indicator light ("MIL" a/k/a "check engine light") on the dashboard. *See* 40 C.F.R. § 86.1806-05(b)-(d).
- b. CAA regulations require that once the MIL has been illuminated, the OBD must record a diagnostic trouble code ("DTC"). 40 C.F.R. § 86-1806-05(e). The OBD stores DTCs that service personnel can read in order to diagnose and repair a vehicle and government inspectors can download to verify a vehicle's compliance with emissions standards.
- c. The OBD may also prompt a driver to correct a problem by altering vehicle performance, such as by putting the vehicle into "limp-home mode." *See* 40 C.F.R. § 86.010-2. In limp-home mode, the Electronic Control Unit commands the engine to downgrade in performance so that the driver is aware that there is a problem with the emission control system, while permitting the vehicle to be driven (albeit slowly) to a service station. *See, e.g.,* 40 C.F.R. § 86.004-25(b)(6)(ii) (requiring the vehicle performance to deteriorate to a point unacceptable for typical driving when DEF replenishment is required).
- 66. <u>Certified Stock Calibrations.</u> OEMs install a suite of pre-set software calibrations for operational parameters ("Certified Stock Calibrations"). These Calibrations control all aspects of vehicle and engine operation including combustion, performance, and operation of EGR and Aftertreatment Systems. The Certified Stock Calibrations for a particular engine operate together to minimize and/or control the formation and emission of pollutants and ensure

the motor vehicle or motor vehicle engine can meet applicable emissions requirements in the CAA and regulations promulgated thereunder.

- 67. Each Certified Stock Calibration is an element of design within the meaning of 40 C.F.R. § 86.1803-01 and 40 C.F.R. § 1039.801 and is an Emission Control System.
- 68. Parameters that affect the operation of the Emission Control System(s) include the following:
- a. calibrations for parameters that affect the operation of the EGR System including EGR flowrate and EGR cooler bypassing;
- b. calibrations for parameters that affect the operation of Aftertreatment System (the DPF, SCR, and/or NAC);
- c. calibrations for parameters that affect engine combustion, performance, and operation, including air-fuel ratio, fuel injection timing, fuel quantity, fuel injection pulse width, fuel injection pressure, fuel injection mass, multiple injection patterns, open loop/closed loop functionality and control, ignition control (spark timing), boost pressure, limiters (fuel, torque, smoke, etc.), manifold pressure, camshaft timing, electronic throttle control, engine air flow characteristics, mass air flow rate, turbocharger/supercharger air flow, and other parameters disclosed on the COC which are elements of the OEM's strategy to control the formation of pollutants in the engine.
- d. calibrations for parameters that affect OBD detection, warning, and recording of malfunctions.

### H. Types of Aftermarket Products at Issue in this Case

69. Third-parties, including Defendant, manufacture, sell, and offer for sale products for use with existing motor vehicles and nonroad vehicles that are designed to enhance the

vehicle's power, performance, or fuel economy (hereinafter "Aftermarket Performance Products").

- 70. Defendant's Aftermarket Performance Products achieve their purpose by replacing, modifying, bypassing, rendering inoperative, facilitating deletion or partial deletion of, interfering with, and/or over-writing OEM-installed Emission Control Systems.
- 71. Defendant's Aftermarket Performance Products "bypass, defeat, or render inoperative" Emission Control Systems within the meaning of 42 U.S.C. § 7522(a)(3)(B) and 40 C.F.R. §§ 1068.101 (b)(1) and (2).
- 72. Specifically, Defendant sells three types of Aftermarket Performance Products: EGR Blocker Plates, Handheld Tuners, and Defeat Tunes.
- 73. <u>EGR Blocker Plates.</u> These aftermarket hardware products physically replace, modify, bypass, render inoperative, facilitate deletion or partial deletion of, and/or interfere with, components of the EGR System. These products are referred to in this Complaint as "EGR Blocker Plates."
- 74. <u>Handheld Tuners.</u> These aftermarket defeat devices are small handheld devices that are connected to a motor vehicle or nonroad vehicle to upload Defeat Tunes on to the vehicle's Electronic Control Unit.
- 75. <u>Tunes.</u> These aftermarket products consist of software that is uploaded into a vehicle's Electronic Control Unit and replaces, modifies, bypasses, renders inoperative, facilitates deletion or partial deletion of, overwrites, and/or interferes with one or more of a vehicle's or engine's Certified Stock Calibrations.

- 76. An individual piece of such software is commonly referred to as a "Tune," derived from its intended purpose of "tuning" the vehicle's performance. The Tunes relevant to this Complaint are referred to herein as "Defeat Tunes."
- 77. There are various methods by which Defeat Tunes may be programmed into the vehicle. Tunes may be uploaded from a handheld tuner, or from a smartphone or laptop to which they are uploaded by email, or through cloud-based technology.
- 78. A single Defeat Tune can alter, disable, bypass, delete, and/or over-write multiple Certified Stock Calibrations and types of Certified Stock Calibrations. For example, a tune that disables the EGR also typically changes OBD-related calibrations so that the EGR deletion will not be detected.
- 79. The Defeat Tunes relevant to this Complaint delete, modify, or overwrite Certified Stock Calibrations relating to the:
  - a) EGR System;
  - b) Aftertreatment Systems including the DPF, SCR, or NAC;
  - c) engine combustion, performance, and operation; or
  - d) OBD functions.

#### V. GENERAL ALLEGATIONS

### A. Diesel Spec's Business

80. From at least September 2018 through May 2022, Defendant has sold thousands of Defeat Devices to and through at least 79 distributors located across the United States, including at least 10 in Ohio, in violation of 42 U.S.C. § 7522(a)(3).

- 81. During that same time, Defendant sold and shipped Defeat Devices directly to individuals and end users located in the United States, including in Ohio, who are not Diesel Spec distributors.
- 82. While Defendant has sold and shipped products to addresses from coast to coast, Defendant has operated a substantial business within the State of Ohio.
- 83. From on or about September 2018 through May 2019, Defendant imported at least 141 shipments to addresses located in the State of Ohio.
  - 84. At least 104 of those shipments contained Defeat Devices.
- 85. From on or about September 2018 through May 2019, Defendant imported shipments to at least 10 different Diesel Spec distributors located in the State of Ohio.
- 86. During that time, Defendant also imported shipments containing Defeat Devices to individuals, who are not apparently Diesel Spec distributors, located in the State of Ohio on at least 10 occasions.
- 87. Additionally, from on or about March 2018 through December 2022, Diesel Spec sold hundreds of remote tunes into the United States, including in Ohio.
- 88. For instance, Defendant sold at least 300 remote tunes to and through one distributor, NRG Repair LLC d/b/a J.B. Truck Service & Parts Inc., which is located in Coldwater, Ohio.
- 89. On its website, individuals and companies who are interested in selling Diesel Spec products can apply to become distributors. Upon information and belief, once approved, Diesel Spec dealers receive a login for the Diesel Spec internal website.

- 90. Upon information and belief, when customers visit the Diesel Spec website looking to purchase products, they can click the "find a dealer" link to be connected with a Diesel Spec distributor in a prospective customer's local area.
- 91. Diesel Spec's website (www.dieselspec.com/contact-us/) states (or stated) that it has the best after sale support in the market with 15 employees dedicated to providing support to customers after purchase, including offering a 30-day money-back satisfaction guarantee.

#### **B.** Defeat Devices

- 92. From at least September 2018 through May 2022, Defendant violated the Clean Air Act by selling, offering for sale, and installing Defeat Devices for use in vehicles or engines in the United States.
- 93. At all relevant times herein, Defendant sold, offered to sell, and/or installed products intended for use in "motor vehicles" and "nonroad vehicles" as those terms are defined by the CAA, 42 U.S.C. § 7550(2) and (11).
- 94. Many of the products that Defendant sold, offered to sell, or installed in the United States are Defeat Devices.
- 95. Defendant claims the Defeat Devices enhance a vehicle's power or performance, "maximize" a vehicle's fuel economy, and reduce the costs associated with maintaining a vehicle's emission control system.
- 96. At all relevant times herein, Defendant sold, offered to sell, and/or installed Defeat Devices individually and through its network of distributors in the United States.
- 97. At all relevant times herein, Defendant, individually and through its network of distributors, also provided after-sale service and support for the Defeat Devices.

- 98. At all relevant times herein, Defendant sold, offered for sale, or installed in the United States, or caused the selling, offering for sale, or installing in the United States, the following types of Defeat Devices: EGR Blocker Plates, Handheld Tuners, and Defeat Tunes.
- 99. At all relevant times herein, the EGR Blocker Plates, Handheld Tuners, and Defeat Tunes that Defendant sold, offered for sale, or installed in the United States, or that Defendant caused to be sold, offered for sale, or installed in the United States, had a principal effect of bypassing, defeating, and/or rendering inoperative Emission Control Systems.
- 100. At all relevant times herein, Defendant knew that the one or more of the EGR Blocker Plates, Handheld Tuners, and/or Defeat Tunes it sold, offered for sale, or installed in the United States, or the causing thereof, were intended for use with or as a part of a motor vehicle, nonroad vehicle, motor vehicle engine, and/or nonroad engine and had a principal effect of bypassing, defeating, and/or rendering inoperative Emission Control Systems.

### **C.** Requests for Information

- 101. On March 23, 2018, pursuant to 42 U.S.C. § 7542(a), EPA hand delivered a request for information to Ian Rees while he was attending the Mid-America Truck Show located in Louisville, Kentucky.
  - 102. Ian Rees was the General Manager of Diesel Spec and an agent of Diesel Spec.
- 103. The information requested by EPA included information about each product that Defendant manufactured or sold after January 1, 2015 that "(a) Changes, affects, modifies, bypasses, or renders inoperative any emission control component, element of design, or emission related part…b) Simulates the operation of any emission control component and/or related parts…and/or (c) Can be programed to modify engine operating parameters, such as injection timing, fuel pressure, and/or pulse width, emission control parameters, or OBD functions."

- 104. This information request directed Diesel Spec to provide this information within30 days.
- 105. Diesel Spec did not provide the requested information by the due date of April 23,2018.
- 106. On September 24, 2018, in coordination with the U.S. Consulate General in Montreal, Environment and Climate Change Canada (ECCC), and the Quebec Ministry of Sustainable Development, Environment, and the Fight Against Climate Change, representatives from EPA traveled to Defendant Diesel Spec's facility in Quebec to discuss Defendant's failure to respond to the March 23, 2018 information request.
- 107. At the September 24, 2018 meeting, EPA representatives reiterated to Diesel Spec representatives that responding to the information request was mandatory and set another 30-day period for a response.
- 108. Diesel Spec agreed to reach out to investigators within one week to provide a timeline of when it would be able to respond to the request.
- 109. As of the date of this Complaint, Diesel Spec has not provided any information responsive to the March 23, 2018 information request.

### FIRST CLAIM FOR RELIEF

### Violations of 42 U.S.C. § 7522(a)(3)(B) and 40 C.F.R. § 1068.101(b)(2) Sale and/or Offer to Sell EGR Blocker Plates

- 110. The United States re-alleges Paragraphs 1 through above as if fully set forth herein.
- 111. Since at least 2018, Defendant sold and/or offered for sale, and/or caused the sale, and/or offering for sale of in the United States, EGR Blocker Plates that replace, modify, bypass,

render inoperative, facilitate deletion or partial deletion of, and/or interfere with the EGR System (hereinafter "Defendant's EGR Blocker Plates").

- 112. Through at least September 2022, Defendant sold products on its website advertised as "EGR Delete Kits for Trucks" which contain EGR Blocker Plates that interfere with the functioning of the EGR System.
- 113. From September 2018 through May 2022, Defendant sent over 1000 shipments into the United States containing EGR Blocker Plates.
- 114. A motor vehicle's EGR System is "a device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with [CAA] regulations" within the meaning of 42 U.S.C. § 7522(a)(3)(B).
- 115. Each of Defendant's EGR Blocker Plates is, and at all relevant times herein was, intended for use with certified motor vehicles, motor vehicle engines, and nonroad vehicles and engines subject to COC requirements under 40 C.F.R. Part 1039, including Caterpillar, Cummins, Detroit, Isuzu, Mercedes, and Paccar engines.
- 116. A principal effect of each of Defendant's EGR Blocker Plates is, and at all relevant times herein was, to bypass, defeat, or render inoperative a motor vehicle's or nonroad vehicle's EGR System.
- 117. Defendant knew or should have known that each of Defendant's EGR Blocker Plates was intended for use with or as a part of any motor vehicle, motor vehicle engine, nonroad vehicle, and/or nonroad engine and had a principal effect of bypassing, defeating, and/or rendering inoperative, Emission Control Systems.
- 118. As of the date of this complaint, Defendant continues to offer Defendant's EGR Blocker Plates for sale in the United States.

- 119. Each of Defendant's EGR Blocker Plates intended for use in a motor vehicle, that Defendant sold and/or offered for sale in the United States, or the causing thereof, is a separate violation of 42 U.S.C. § 7522(a)(3)(B). 42 U.S.C. § 7524(a).
- 120. Each of Defendant's EGR Blocker Plates, intended for use in a nonroad vehicle, that Defendant sold and/or offered for sale in the United States, or the causing thereof, is a separate violation of 42 U.S.C. § 7522(a)(3)(B) and 40 C.F.R. § 1068.101(b)(2).
- 121. For each violation of 42 U.S.C. § 7522(a)(3)(B), Defendant is liable to the United States for injunctive relief and civil penalties as set forth in Paragraph 41.
- 122. For each violation of 40 C.F.R. § 1068.101(b)(2), Defendant is liable to the United States for injunctive relief and civil penalties as set forth in Paragraph 47 above.

### SECOND CLAIM FOR RELIEF

### Violations of 42 U.S.C. § 7522(a)(3)(B) and 40 C.F.R. § 1068.101 (b)(2) Sale and/or Offer to Sell Handheld Tuners

- 123. The United States re-alleges Paragraphs 1 through 109 above as if fully set forth herein.
- 124. Since at least 2018, Defendant sold and/or offered for sale, and/or caused the sale and/or offer for sale of in the United States, Handheld Tuners that enable a distributor or final purchaser to upload Defeat Tunes to a vehicle to alter or overwrite Certified Stock Calibrations.
- 125. Each Certified Stock Calibration is an "element of design installed on or in a motor vehicle or motor vehicle engine in compliance with [CAA] regulations" within the meaning of 42 U.S.C. § 7522(a)(3)(B) or a "device or element of design installed on or in engines/equipment in compliance with the regulations" within the meaning of 40 C.F.R. § 1068.101(b)(1).

- 126. Each of Defendant's Handheld Tuners is, and at all relevant times herein was, intended for use with certified motor vehicles and motor vehicle engines or nonroad vehicles and engines subject to the requirements of 40 C.F.R. Part 1039.
- 127. Some of Defendant's Handheld Tuners are compatible for use with Cummins, Detroit, International, Isuzu, Mercedes, and Paccar engines in diesel trucks.
- 128. Others of Defendant's Handheld Tuners are compatible for use with DeCase, Challenger, Claas, Fendt, John Deere, Massey Ferguson, New Holland, Valtra, Caterpillar, and Steyr engines in agricultural equipment; and Case, JCB, John Deere, New Holland, Caterpillar, Bobcat, Hitachi, and Komatsu engines in construction equipment.
- 129. A principal effect of each of Defendant's Handheld Tuners is, and at all relevant times herein was, to bypass, defeat or render inoperable a Certified Stock Calibration related to a motor vehicle's EGR System, Aftertreatment System, engine operation and combustion, and/or OBD System.
- 130. Defendant knew or should have known that each of Defendant's Handheld Tuners was compatible for use with or as a part of any motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine and had a principle effect of bypassing, defeating, and/or rendering inoperative Emission Control Systems.
- 131. From September 2018 through May 2022, Defendant shipped more than 50 shipments to the United States containing Handheld Tuners.
- 132. Each of Defendant's Handheld Tuners compatible for use on a motor vehicle or motor vehicle engine is a separate violation of 42 U.S.C. § 7522(a)(3)(B). 42 U.S.C. § 7524(a).

- 133. Each of Defendant's Handheld Tuners compatible for use on a nonroad vehicle or nonroad engine is a separate violation of 42 U.S.C. § 7522(a)(3)(B) and 40 C.F.R. § 1068.101 (b)(2).
- 134. As of the date of this complaint, Defendant continues to offer Defendant's Handheld Tuners for sale in the United States.
- 135. For each violation of 42 U.S.C. § 7522(a)(3)(B), Defendant is liable to the United States for injunctive relief and civil penalties as set forth in Paragraph 41 above.
- 136. For each violation of 40 C.F.R. § 1068.101(b)(1) or (2), Defendant is liable to the United States for injunctive relief and civil penalties as set forth in Paragraph 47 above.

### THIRD CLAIM FOR RELIEF

# Violations of 42 U.S.C. § 7522(a)(3)(B) and 40 C.F.R. § 1068.101 (b)(2) Sale and/or Offer to Sell Defeat Tunes

- 137. The United States re-alleges Paragraphs 1 through 109 above as if fully set forth herein.
- 138. Since at least 2018, Defendant sold and/or offered for sale, or caused the sale and/or offer for sale of, hundreds of different types of Defeat Tunes (hereinafter "Defendant's Defeat Tunes") in the United States.
- 139. Some of Defendant's Defeat Tunes altered or overwrote multiple Certified Stock Calibrations.
- 140. Defendant's Defeat Tunes delete, modify, and/or overwrite one or more of the following types of Certified Stock Calibrations:
- a. Certified Stock Calibrations relating to the EGR System, as well as signals or records related to the EGR System.

- b. Certified Stock Calibrations relating to the Aftertreatment System, including the DPF, SCR, or NAC, as well as signals or records related to these components.
- c. Certified Stock Calibrations related to engine combustion, performance, and operation such as air-fuel ratio, fuel injection timing, fuel quantity, fuel injection pressure, and fuel injection pulse width.
- d. Certified Stock Calibrations related to OBD functions in order to prevent the generation of diagnostic trouble codes, prevent the malfunction indicator light from illuminating, and/or prevent the OBD from putting the vehicle into "limp-home mode" due to changes in Certified Stock Calibrations or removal of the EGR System or Aftertreatment System.
- 141. Some of Defendant's Defeat Tunes replace, modify, bypass, render inoperative, facilitate deletion or partial deletion of, over-write, and/or interfere with operation of the EGR System, Aftertreatment System, Certified Stock Calibrations, and the OBD System.
- 142. For example, Defendant's websites recognize the emissions-reduction benefits of these Emission Control Systems and provide information about the Defeat Tunes Defendant offers for sale.
- 143. Appendix A contains image captures from the Defendant's website showing how it promotes its Defeat Tunes for motor vehicles.
- 144. Appendix B contains statements that appear (or appeared) on the Defendant's agriculture and construction websites promoting its Defeat Tunes for nonroad vehicles.
- 145. From September 2018 through May 2022, Defendant shipped more than 950 shipments into the United States containing Electronic Control Units on which Defendant had installed Defeat Tunes.

- 146. Defendant fulfills some orders of Defeat Tunes electronically by installing the altered code to the Electronic Control Units remotely; therefore, the number of sales is likely higher than 950.
- 147. Defendant has not provided any information to the United States regarding the orders of Defeat Tunes fulfilled to customers in the United States.
- 148. Each of Defendant's Defeat Tunes meant for installation in a motor vehicle or motor vehicle engine is a separate violation of 42 U.S.C. § 7522(a)(3)(B). 42 U.S.C. § 7524(a).
- 149. Each of Defendant's Defeat Tunes meant for installation in a nonroad vehicle or nonroad engine is a separate violation of 42 U.S.C. § 7522(a)(3)(B) and 40 C.F.R. § 1068.101 (b)(2).
- 150. As of the date of this Complaint, Defendant continues to offer Defendant's Defeat Tunes for sale into the United States.
- 151. For each violation of 42 U.S.C. § 7522(a)(3)(B), Defendant is liable to the United States for injunctive relief and civil penalties as set forth in Paragraph 41 above.
- 152. For each violation of 40 C.F.R. § 1068.101(b)(1) or (2), Defendant is liable to the United States for injunctive relief and civil penalties as set forth in Paragraph 47 above.

### **FOURTH CLAIM FOR RELIEF**

### Violations of 42 U.S.C. § 7522(a)(3)(A) and 40 C.F.R. § 1068.101(b)(1) Removing or Rendering Inoperative Emission Control Systems

- 153. The United States re-alleges Paragraphs 1 through 109 above as if fully set forth herein.
- 154. Since at least 2018, and continuing thereafter, Defendant installed, or caused persons (including, but not limited to, their employees, distributors, and customers) to install, Defeat Tunes on or in motor vehicles, motor vehicle engines, nonroad vehicles, and/or nonroad

engines after the sale and delivery of the vehicle and/or engine to the ultimate purchaser in the United States.

- 155. There are two primary methods in which Defendant installed, or caused persons (including, but not limited to, their employees, distributors, and customers) to install, Defeat Tunes.
- 156. First, in some instances Defendant's distributors or customers would remove a vehicle's Electronic Control Unit and ship it to Defendant's shop in Canada where Defendant, by and through its employees, would modify the Electronic Control Unit by installing Defeat Tunes before shipping it back to the distributor or customer for reinstallation in the vehicle in the United States (hereinafter referred to as "manual installation").
- 157. Additionally, Defendant installed Defeat Tunes by having its distributors or customers send the vehicles unmodified Electronic Control Unit data wherein Defendant, by and through its employees, would modify the Electronic Control Unit by installing Defeat Tunes and send it back to the distributor or customer for upload onto the Electronic Control Unit located in the United States (hereinafter referred to as "remote installation").
- 158. Defendant installed (or caused to be installed), either through manual or remote installation, Defeat Tunes on vehicles and/or engines located in the United States, in order to render inoperative devices or elements of design in those vehicles and/or engines that were installed to comply with CAA regulations.
- 159. Defendant knew that the installation of Defeat Tunes, either through manual or remote installation, removed or rendered inoperative devices or elements of design that were being installed for such use or put to such use.

- 160. Each installation of the Defeat Tunes by, or caused by, Defendant, either through manual or remote installation, on each motor vehicle or motor vehicle engine constitutes a separate violation of 42 U.S.C. § 7522(a)(3)(A).
- 161. Each installation of Defeat Tunes by, or caused by, Defendant, either through manual or remote installation, on each nonroad vehicle or nonroad engine constitutes a separate violation of 42 U.S.C. § 7522(a)(3)(A) and 40 C.F.R. § 1068.101(b)(1).
- 162. For each violation of 42 U.S.C. § 7522(a)(3)(A), Defendant is liable to the United States for injunctive relief and civil penalties as set forth in Paragraph 41 above.
- 163. For each violation of 40 C.F.R. § 1068.101(b)(1), Defendant is liable to the United States for injunctive relief and civil penalties as set forth in Paragraph 47 above.

### FIFTH CLAIM FOR RELIEF

# Violations of 42 U.S.C. § 7542(a) Failure to Respond to Request for Information Pursuant to 42 U.S.C. § 7542

- 164. The United States re-alleges Paragraphs 1 through 109 above as if fully set forth herein.
- 165. Defendant is a person subject to Part A (Motor Vehicle Emission and Fuel Standards) of Subchapter II of the CAA.
- 166. EPA's March 23, 2018 Request for Information required Defendant to provide information regarding each product it manufactured or sold after January 1, 2015 in order to determine if it was in compliance with the CAA pursuant to its authority under 42 U.S.C. § 7522(a)(2)(A).
- 167. Defendant failed to provide any information required by EPA's Request for Information.

- 168. Each of Defendant's failures to provide information required by EPA's Request for Information is a violation of 42 U.S.C. § 7542(a).
- 169. For each violation of 42 U.S.C. § 7542(a), Defendant is liable to the United States for injunctive relief and civil penalties as set forth in Paragraph 50 above.

### **RELIEF REQUESTED**

WHEREFORE, the United States respectfully requests that this Court:

- A. Permanently enjoin Defendant from selling, offering to sell, or installing motor vehicle parts or components intended for use with a motor vehicle or motor vehicle engine in the United States where a principal effect of such part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine in compliance with the CAA;
- B. Order Defendant to respond fully and completely to EPA's March 23, 2018 information request;
- C. Order Defendant to take other appropriate actions to remedy, mitigate, and offset the harm caused by their alleged CAA violations in the United States;
- D. Assess civil penalties against Defendant for each part or component Defendant sold and shipped into the United States, or caused the selling thereof, in violation of 42 U.S.C. § 7522(a)(3)(B), of up to \$5,580 for each violation;
- E. Assess civil penalties against Defendant for each part or component Defendant sold and shipped into the United States, or caused the selling thereof, in violation of 42 U.S.C. § 7547(a) and 40 C.F.R. § 1068.101(b)(1) or (2) of up to \$5,580 for each violation;
- F. Assess civil penalties against Defendant for each motor vehicle or engine in the United States on which Defendant removed or rendered inoperative or caused to remove or

render inoperative a device or element of design in violation of 42 U.S.C. § 7522(a)(3)(A) and (B), of up to \$5,580 for each violation;

- G. Assess civil penalties against Defendant for each nonroad vehicle or nonroad engine in the United States on which Defendant removed or rendered inoperative any device or element of design installed in compliance with the regulations in violation of 42 U.S.C. § 7547(a) and 40 C.F.R. § 1068.101(b)(1) or (2) in the amount up to \$5,580 for each violation;
- H. Assess civil penalties against Defendant for failure to provide a timely response to EPA's Information Request of up to \$55,808 per day pursuant to 42 U.S.C. §7522(a)(2)(A); 42 U.S.C. §8 7524(a), as modified by 40 C.F.R. § 19.4 (2022);
  - I. Award the United States its costs and disbursements in this action; and
  - J. Award such other and further relief as the Court may deem just and proper.

### Respectfully submitted,

MICHELLE M. BAEPPLER First Assistant U.S. Attorney Northern District of Ohio

/s/ Angelita Cruz Bridges
ANGELITA CRUZ BRIDGES
(0072688)
Assistant U.S. Attorney
United States Attorney's Office
Northern District of Ohio
Four Seagate, Suite 308
Toledo, Ohio 43604-2624
Tel: (419) 259-6376
Fax: (419) 259-6471

Angelita.Bridges@usdoj.gov

OF COUNSEL:
Andre Daugavetis

Tasia Kastanek Associate Regional Counsels U.S. Environmental Protection Agency 77 W. Jackson Blvd. Chicago, IL 60604 TODD KIM

Assistant Attorney General Environmental and Natural Resources Division United States Department of Justice

/s/ Traci N. Cunningham
TRACI CUNNINGHAM

LILA JONES
Trial Attorneys
Environmental Enforce

Environmental Enforcement Section Environment and Natural Resources Division United States Department of Justice P.O. Box 7611, Ben Franklin Station

Washington D.C. 20044-7611 Tel: (202) 598-0020

traci.cunningham@usdoj.gov

OF COUNSEL:

Mark Palermo
Attorney-Advisor
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
palermo.mark@epa.gov

### **TABLE OF ACRONYMS**

CO Carbon Monoxide

COC Certificate of Conformity

CAA Clean Air Act

DEF Diesel Exhaust Fluid
DPF Diesel Particulate Filter
DTC Diagnostic Trouble Code
EGR Exhaust Gas Recirculation

EPA United States Environmental Protection Agency

MIL Malfunction Indicator Light
NAC NO<sub>x</sub> Adsorption Catalyst
NMHC Non-methane Hydrocarbon

NO<sub>x</sub> Nitrogen Oxide
OBD On Board Diagnostic

OEM Original Equipment Manufacturer

PM Particulate Matter

SCR Selective Catalytic Reduction

### **APPENDIX A**



## DIESEL SPEC INC

TOLL-FREE: 1-855-932-0060



## EGR DELETE KITS FOR TRUCKS

Heavy-duty trucks these days come with various components integrated to work with the engine and the exhaust to minimize the amount of harmful pollutants that are released into the environment. While the concept behind these components is well intentioned, the execution of them leaves something to be desired. In fact, many of these components trade minimal sustainability benefits for performance, fuel economy and maintenance benefits. That's right, many of these components actually work against your truck – not with it. One of these components is the EGR, or exhaust gas recirculation – and it's why many drivers and fleet managers just opt to have the component deleted. You can browse the Diesel Spec website for a comprehensive overview of all the engines we're able to perform EGR delete on, but here's a brief general overview.

### A BRIEF OVERVIEW OF EGR DELETE

The EGR works to minimize pollutants by recirculating a portion of the exhaust back through the engine. But because of all of the issues associated with the EGR, many operators opt to have it deleted. An EGR delete consists of using a delete kit to remove the system. The benefits include an improvement in engine performance, fuel economy and not having to worry about emergency maintenance on the EGR (or even the engine itself). Because particulates, soot and debris can accumulate over time when they're recirculated back through the engine, the engine may require more maintenance than one that doesn't work with an EGR. It's all a big part of the value proposition involved with having the EGR deleted altogether.

# BROWSE OUR WEBSITE FOR MORE INFORMATION ABOUT EGR DELETE

To learn more about the EGR delete services that we offer for trucks, and what engine makes and models we're able to perform this service on, browse our website or contact us today. You'll be able to find comprehensive information on all of the engines we service and the benefits of what an EGR delete can do for your heavy-duty truck and your operations. Don't let the EGR become a burden, as having it removed has its benefits. To learn more, browse the various sections on our website or contact Diesel Spec today.



TOLL-FREE: 1-855-932-0060



HOME > DPF Delete

## **DPF DELETE KITS FOR TRUCKS**

The diesel particulate filter, or DPF, is a standard component on most of today's heavy-duty trucks. While it serves a noble purpose, it's also one of the most problematic components on a truck that can greatly hamper its performance, its fuel economy and its maintenance requirements. For this reason, many operators or fleet managers just opt to have this component removed from the vehicle altogether, a practice known as "DPF delete." Diesel Spec can help, as we perform delete services on the widest ranges of diesel engines in the market.

### WHY THE ISSUES WITH THE DPF?

Like we said, the DPF is designed to serve an important purpose, that being capturing soot and other particulates from the exhaust before they have a chance to be released into the environment. However, the DPF presents logistical issues in how it is cleaned. And if the DPF cannot be properly cleaned at the necessary intervals, then it's going to clog up. When it clogs, it won't just lead to maintenance with the DPF, but potentially with the engine as well. This can cause unexpected maintenance and downtime, which can cut into a fleet's profits and add to its overhead costs. In addition to this, the DPF also limits the performance of the engine, which can lead to performance and production issues. It's many of these circumstances – and more – that lead many drivers and fleet managers to just avoid the headache altogether and have this component deleted.

# BROWSE OUR WEBSITE FOR MORE INFORMATION ABOUT DPF DELETE

To learn more about the DPF delete services that we offer for heavy-duty trucks, and what engine makes and models we're able to perform this service on, browse our website or contact us today. You'll be able to find comprehensive information on all of the truck engines we service and the benefits of what a DPF delete can do for your truck and your operations. Don't let the DPF become a burden on your trucks any longer, having it removed has its benefits. To learn more, browse the various sections on our website or contact Diesel Spec today.



TOLL-FREE: 1-855-932-0060



HOME > UREA Delete for trucks

## UREA DELETE KITS FOR TRUCKS

One of the factors that helps Diesel Spec stand out from everyone else that performs delete and engine tuning services is the vast amount of vehicles and engine models we service. Literally, no other provider can come close to the expertise that we have in this field, and you can browse our website to learn more about one of the key delete services that we provide: UREA delete.

### A BRIEF OVERVIEW OF UREA DELETE

As you likely know, your heavy-duty truck requires DEF. Specifically, this solution is injected into the exhaust stream to eliminate some of the pollutants that are emitted into the environment. The UREA solution can be problematic. For one, it adds to the overall operating cost of a driver or fleet manager. Two, the system is prone to line blockages and corrosion. However, often times the bigger issue is the component the urea is designed to work with – the SCR. If the SCR isn't working properly, it can throw off everything in the truck, something that often requires repair and costly vehicle downtime. That's why many drivers and fleet managers just opt to have the UREA deleted, thereby rendering the SCR obsolete. We can help, and we work with dozens and dozens of diesel engines under the hood of heavy-duty trucks, as you can tell from exploring our website.

# BROWSE OUR WEBSITE FOR MORE INFORMATION ABOUT UREA DELETE

To learn more about the UREA delete services that we offer for heavy-duty trucks, and what engine makes and models we're able to perform this service on, browse our website or contact us today. You'll be able to find comprehensive information on all of the engines we service and the benefits of what a UREA delete can do for your vehicles and your operations. Don't let the UREA system burden you any longer, as having it removed has its benefits. To learn more, browse the various sections on our website or contact Diesel Spec today.

### **APPENDIX B**

#### **EGR - DPF - UREA DELETE**



EGR - DPF - ADD BLUE Removal means to disable the exhaust gas recirculation valve, cancel the Regen system and eliminate the need to fill the UREA Tank.

As a result of shutting down the EGR valve, Diesel Particulate Filter and Urea, the engine's last- and temperature-condition stays closed. This modification was developed by Diesel Spec to clear away several problems in countries that have to deal with a poor quality of Diesel.

Our distributors on South America, Asia or eastern Europe are happy about this development, since they have to deal with a high amount of water in Diesel they always have problems with the EGR valve, DPF and SCR. These problems result in a decrease of the engine's lifetime and then again that leads to visiting the garage quite often.

Through a disable of the EGR valve, DPF and SCR we avoid or even eliminate these problems.

#### Results are:

- · Up to 20% increased performance
- Up to 30% increased torque
- 5% 15% increased fuel efficiency
- Prolonged life of the engine, due to increased efficiencies
- · No more downtime due to defective components

### **EGR - DPF - UREA DELETE**



EGR - DPF - ADD BLUE Removal means to disable the exhaust gas recirculation valve, cancel the Regen system and eliminate the need to fill the UREA Tank.

As a result of shutting down the EGR valve, Diesel Particulate Filter and Urea, the engine's last- and temperature-condition stays closed. This modification was developed by Diesel Spec to clear away several problems in countries that have to deal with a poor quality of Diesel.

Our distributors on South America, Asia or eastern Europe are happy about this development, since they have to deal with a high amount of water in Diesel they always have problems with the EGR valve, DPF and SCR. These problems result in a decrease of the engine's lifetime and then again that leads to visiting the garage quite often.

Through a disable of the EGR valve, DPF and SCR we avoid or even eliminate these problems.

#### Results are:

- Up to 20% increased performance
- Up to 30% increased torque
- 5% 15% increased fuel efficiency
- · Prolonged life of the engine, due to increased efficiencies
- · No more downtime due to defective components